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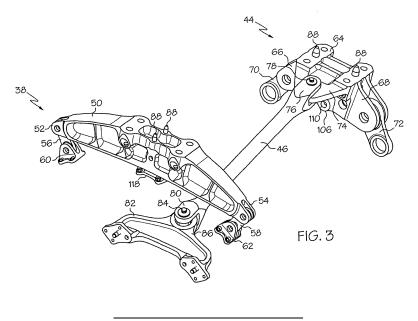
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### (54) Fail-safe aircraft engine mounting system

(57) A fail-safe lug (116) is carried by an engine frame member (42) and receives a clevis (106, 108) carried by an engine mount member (64). The mount member (64) includes side links (70, 72) that transmit transverse loads between the engine and the airframe and a thrust link (46) that transmits axial, engine thrust loads between the engine and the airframe. A fail-safe pin (114) is carried

by the clevis (106, 108) and has an outer diameter that is smaller than an aperture (130) in the lug (116) and through which the pin (114) passes, so that no loads are imposed on the fail-safe, pin (114) in normal operation. When one or more of the links (70, 72) are no longer capable of transmitting loads, the fail-safe arrangement becomes operative to accommodate the loads transmitted between the engine and the airframe.





## **EUROPEAN SEARCH REPORT**

Application Number EP 05 25 0398

	DOCUMENTS CONSID	ERED TO BE RELEVANT		
Category	Citation of document with ir of relevant pass	ndication, where appropriate, ages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
Υ		.995-11-15)	1-5	INV. B64D27/26
Υ			1-5	
Υ	EP 0 744 338 B (BOE 25 August 1999 (199 * column 3, line 10 figures 1-9 *		1-5	
Υ	27 July 1999 (1999-	IS JOE E [US] ET AL) -07-27) - column 5, line 16;	1-5	TECHNICAL FIELDS SEARCHED (IPC)
Υ	US 5 303 880 A (CEN AL) 19 April 1994 ( * the whole documer		1-5	F02C
	The present search report has	been drawn up for all claims Date of completion of the search		Examiner
	The Hague	9 December 2008	Hof	mann, Udo
X : parti Y : parti docu A : tech O : non	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone icularly relevant if combined with another icularly relevant if combined with another icularly relevant of the same category nological background written disclosure mediate document	T : theory or principl E : earlier patent do after the filing da ber D : dooument cited f L : dooument cited f  & : member of the si dooument	cument, but public te n the application or other reasons	shed on, or

EPO FORM 1503 03.82 (P04C01)

#### ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 05 25 0398

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

09-12-2008

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
EP 0564126	В	15-11-1995	DE DE EP JP JP JP US	69300789 D1 69300789 T2 0564126 A1 2045219 C 6008890 A 7067920 B 5320307 A	21-12-1999 18-07-1999 06-10-1999 09-04-1999 18-01-1999 26-07-1999
EP 0872418	A	21-10-1998	CN DE DE	1196318 A 69803951 D1 69803951 T2	21-10-1998 04-04-2007 28-11-2007
EP 0744338	В	25-08-1999	DE DE EP RU US	69511682 D1 69511682 T2 0744338 A1 2167788 C2 5649417 A	30-09-199 23-12-199 27-11-199 27-05-200 22-07-199
US 5927644	Α	27-07-1999	NONE		
US 5303880	Α	19-04-1994	NONE		

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82